POPULATION TODAY

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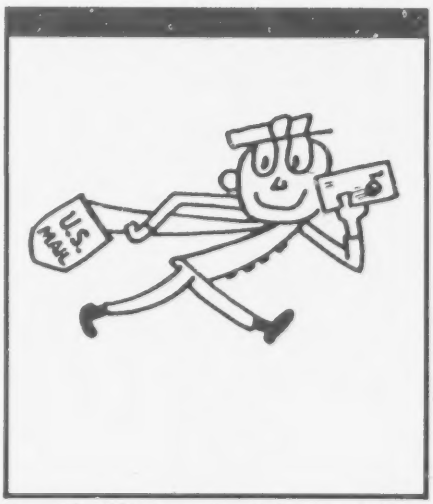

How Mr. ZIP views the U.S. population. (See page 6.)

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FROM THE EDITOR'S DESK

During the Roaring Twenties, time seemed to come to a stop – at least in the United States. No wars or revolutions, lots of *laissez-faire* isolationism, bathtub gin, and Florida land booms. Government snoozed.

In retrospect, though, the 1920s can be better perceived as a revolutionary decade in U.S. history. Its secret theme was sociocultural breakout – led by economic boom times, changing roles for women, and the automobile, not to mention the Jazz Age. (Economic termites were also munching in the national foundations – but that's another story.)

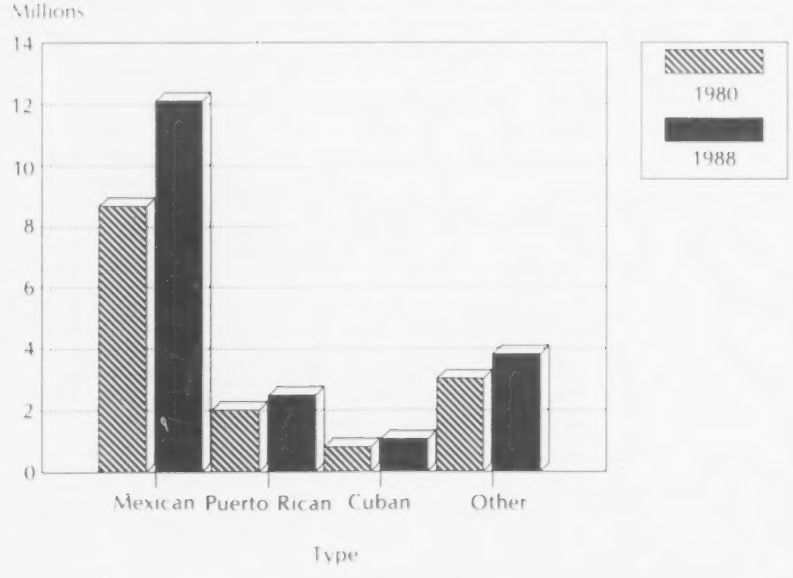
When it comes to U.S. current history, the 1980s have seemed like a similar snooze time. Call it what you will – consolidation, complacency, or leading the world by example – the U.S. turned inward. Far from feeling like they're on a mission to save the world, Americans (to judge by that instantly famous National Geographic Society survey last summer on geographic knowledge), seem unsure as to its whereabouts.

Other 1980s trends, however, have been extraordinary. This decade's theme – internationalization, as world-spanning economic and financial markets coalesce, global suppliers and customers establish beachheads here, data and communications overwhelm national borders, and some 6 or 7 million legal and illegal immigrants start new American lives. Snooze all you like, but *plus ça même chose, plus ça change*.

– Art Haupt

SPEAKING GRAPHICALLY

Components of the U.S. Hispanic Population: 1980-1988



There are 19.4 million Hispanics in the United States, according to a new Census Bureau survey. This population group has increased by 34 percent during the 1980s and now constitutes 8.1 percent of the total U.S. population. Fifty-five percent of all U.S. Hispanics live in either California or Texas.

Source: Census Bureau, *Current Population Reports*, Series P-20, No. 431.

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Population in Dust of Campaign Trail?

With the Presidential campaign coming down the home stretch, many vital issues – from National Guard recruitment to the Pledge of Allegiance – have surfaced and sunk as Vice President George W. Bush and Gov. Michael S. Dukakis compete for the privilege of assuming the burdens of the White House.

As 1988 Republican candidate, Bush has pledged that if elected, he would install an administration more "gentle" and caring about social problems. He is prolife on abortion. In his autobiography, *Looking Forward*, Bush does not mention foreign assistance in general or population assistance in particular.

But during the period he was Ambassador to the United Nations during the early 1970s, Bush contributed the foreword to Phyllis Piotrow's *World Population Crisis: The United States Response* (1973), in which he paid tribute to such pioneers in the population assistance field as Alan Guttmacher and William H. Draper Jr.

"It is quite clear that one of the challenges of the 1970s, the Second United Nations Development Decade, will be to curb the world's fertility. We proceed by trial and error," wrote Bush at that time. "Will we learn fast enough from one another and with one another how to defuse the population bomb?" (In the past, moderate Republicans as a political subgroup have shown a lively interest in population issues rivaling that of any segment of the political spectrum.)

Democratic candidate Dukakis has stressed that his approach would be different from the current East-West contention that currently dominates the U.S.'s approach to international affairs. After college studies in Peru and later travels in Central and South America, Dukakis has evidenced a particular interest in Latin America and a belief in "process" and consensus among interested parties that, supporters say, he would apply to both domestic and international affairs. A prochoice advocate, Dukakis has specifically called for the renunciation of the 1984 "Mexico City policy," which currently prohibits U.S. funding for family planning through any group that advocates abortion.

The Candidates' Positions on Population Programs

For many years, the United States has supported and helped to finance programs of family planning, particularly in developing countries. Our primary objective is to encourage developing countries to adopt sound economic policies and, where appropriate, population policies consistent with respect for human dignity and family values.

I will continue to support an approach to world population based on respect for human life, enhancement of human dignity, and strengthening of the family.

– George W. Bush

Richard Sobol

I strongly believe that in the years ahead, we will cease to think of environmental issues as "domestic" and will instead think of them as overarching concerns in the way we now think of foreign and defense policies. The dissolving ozone layer, global warming, overpopulation, deforestation and the loss of species are all aspects of the same phenomenon: as our aggregate effect on our environment increases, so toodoes the interdependence of the world's peoples. Future presidents will need to understand this in a way that past presidents have not.

Since 1968, the United States, principally [through the Agency for International Development], has also been a leader in providing funds and technical assistance for voluntary family planning throughout the developing world. In 1984, however, the Administration greatly restricted that role in the Mexico City Policy. Given the direct relationship between overpopulation and environmental degradation, a reversal of the Mexico City Policy would be both substantively desirable and conducive to restoring our role as a global leader on environmental and population issues.

– Michael S. Dukakis

"30 Million Jobs"

Campaign issues that have tangentially touched on population have, however, been a little less portentous than those mentioned above. The discussion about the Vietnam-era service of Bush's running mate Sen. Dan Quayle (R-Ind.) and his generation has highlighted the fact that of the 26.8 million males born between 1939 and 1954 who were of draft age sometime during the Vietnam era (the period between 1964 and 1975), a relatively small minority – about 2.2 million – served in the military and did tours in Vietnam. They were part of a larger group – 10.9 million – that served in the military. This group, which included 1 million National Guardsmen and Reservists, still constituted only 41 percent of all those in the draft-eligible ages. The substantial majority – 16 million – of the male Vietnam-era generation were never in uniform.

In the meantime, Vice President Bush in his nomination acceptance speech called for "30 million jobs in eight years" – a pledge subsequently admitted to be visionary rather than numerically literal. While immigration flow and employment patterns may change more than expected, at present the U.S. population 16 years and over is projected to grow by only about 13 million between now and 1996. Labor participation rates, which historically

Continued on next page

Population Issues

Continued from preceding page

have been rising, now include 65.3 percent of that population, as of 1986.

As of August 1988 there were 122,031,000 people in the labor force – i.e., those working or looking for work. Of these, 6.8 million were out of work, for an unemployment rate of 5.6 percent.

Thus, in order to fill 30 million new jobs between now and 1996, some combination of the following groups would have to go to work, in addition to the population's present workers: (a) all those presently unemployed; (b) all of the 13 million new people who necessarily will be joining the over-16 population because of the aging process; and (c) about 10 million of those over 16 who presently are not working or looking for jobs.

As a consequence of (c), the labor participation rate (those over 16 who have jobs or are looking for jobs) would rise five percentage points, to about 70 percent. To give some idea of how difficult raising participation is: Helped along by serious upheavals in the economy, household structure, and the role of women in the 1960s, 1970s, and 1980s, the 5-percentage-point rise up to today's 65 percent still took 15 years.

Future Population Issues

Whoever becomes president will face the usual plethora of standing problems. Immigration issues have not gone away with the passage into law of the 1986 Immigration Reform and Control Act. Population assistance is still a live issue (see "Washington Watch," page 4). Goals and levels of foreign aid – at a low ebb – remain unsettled. A new bill now before Congress, called the Global Poverty Reduction Act (HR4277 and S2454), aims to "develop a plan to ensure that the United States development assistance contributes measurably to eradicating the worst aspects of absolute poverty by the year 2000."

The bill's approach is to set goals and then allocate funds to achieve them. The goals are: lowering the under-5-years-of-age mortality rate to 70 deaths per 1,000 live births in the less developed world (the current rate is about 121); achieving a female literacy rate of 80 percent; and raising of living standards so that no nation has more than 20 percent of its population living in absolute poverty.

So far, the bill has 170 sponsors in the House and 17 in the Senate. Its chances of passage are considered remote, but its aims may be incorporated in the rewriting of the nearly-three-decade-old U.S. Foreign Assistance Act which is scheduled for next year.

– A.H.

Elections, campaigning, holidays, and fatigue are beginning to take their toll on the 100th Congress. Time is running out to complete the ambitious legislative agenda for 1988. Even with these pressures, however, the House and Senate have most of the appropriations bills in good shape as the end of the fiscal year approaches – Sept. 30. These include funding for international population assistance and domestic funding for demographic research.

International Population Assistance

The Senate passed its version of the Foreign Aid Appropriations bill this summer. The Senate bill includes $198 million for population development assistance – the same amount as in the House bill. The Senate also retained the provision that "none of the funds made available in this Act nor any unobligated balances from prior appropriations may be made available to any organization or program which, as determined by the President of the United States, supports or participates in the management of a program of coercive abortion or involuntary sterilization."

The Senate bill includes $40 million for International AIDS Prevention – a $5 million increase over the House bill – provided that $25.5 million go directly to the World Health Organization's program on AIDS.

Both the Senate and House bills include $500 million for continuation of the special Africa Fund. The Senate Bill, however, continues an attempt to earmark the funds within this special program by instructing the Agency for International Development to target the equivalent of 10 percent of the funds for each of the following: environment, health, and family planning.

Funding for Demographic Research

In August, House and Senate conferees worked out differences in their respective Appropriations bills for Labor, Health and Human Services, Education, and related agencies. One issue resolved concerned funding for Population Research Centers supported by the National Institute of Child Health and Human Development (NICHD) at the National Institutes of Health (NIH).

The final agreement was good news for the Population Centers – with one qualification. The conferees agreed to continue all centers up for renewal – this included three Population Research Centers, but the appropriations figure was not quite adequate to continue funding at current levels. The Centers will have to absorb a 10-15 percent cut, but even that is an improvement over the 17 percent cut negotiated with the Centers last year.

NICHD's Population Research Centers (inadvertently referred to as "Population Resource Center" in the July-August issue of *PT*) provide a core infrastructure for demographic research activities at eight universities and one specialized center at the Rand Corporation in Santa Monica, Calif.

– Nancy McConnell

Nancy McConnell is director of the Washington, DC., office of the Population Resource Center. The Center monitors legislative issues of concern to the Population Association of America. Neither the Center nor the Association advocates any particular population policy but works to protect funding for qualtiy demographic research.

IRCA Aftermath

The Immigration Reform and Control Act of 1986 (IRCA) has drastically altered U.S. immigration policy. Its major provisions were designed to both regularize the status of undocumented immigrants and to deter future undocumented immigration.

May 4, 1988, marked the end of the first stage of the legalization process for individuals applying under the pre-1982 provisions (called I-687) of the Act. (See *PT*, June 1988.) By that date 1,760,793 individuals had filed applications. As of August 5, 1988, the Immigration and Naturalization Service (INS) reports that 740,675 individuals had already applied under the Special Agricultural Worker (SAW) provisions (called I-700). The deadline for I-700 applications is not until Nov. 30, 1988, and INS anticipates 850,000 persons may apply by the deadline.

The actual number of pre-1982 (I-687) applicants falls within the range of INS's low (1,342,000) and high (2,663,000) projections. For the agricultural workers, it was projected that 400,000 individuals would apply. The numbers as of July 22, 1988, exceed that calculation by more than 300,000. The INS has since increased its estimate to 850,000.

Summary statistics compiled as of July 22, 1988, tell a lot about the resident undocumented population. The figures that follow are estimates based on the cases already processed; it should be remembered there is a lag between the time of application and the time the data are available on the INS's Legalization Application Processing System (LAPS) due to the time needed to load and process completed applications.

Where Are They From?

The pre-1982 applicants are 55 percent male and 45 percent female, while the agricultural workers are 84 percent male and 16 percent female.

About 80 percent of the I-687 applicants entered without INS inspection and about 20 percent overstayed their nonimmigrant visas. (Information unavailable for SAWs.)

Applicants of both types are dis-

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SURVEY REPORT

Ghana

About two-thirds of Ghana's women want either to limit or space births – important steps in bringing down the country's high total fertility rate of 6.4 children per woman.

That is the finding of the Ghana Demographic and Health Survey's 1988 report. Of the 4,488 women aged 15-49 years interviewed, 22.8 percent of the currently married women wanted no more children while 44.9 percent of them wanted them only after two years of spacing.

The survey also illustrated the different fertility intentions of husbands and wives. Only 19.2 percent of the husbands did not want more children, compared to 22.8 percent of currently married women. On the other hand, 22.6 percent of the husbands wanted more children within two years while only 19.5 percent of the women did. The married women also wanted to stop having children earlier than married men.

Although about three-quarters of the currently married women have heard of contraceptive methods (more familiar ones being the pill, female sterilization, and the condom), only 12.8 percent of them are currently using some type of contraception: 5.1 percent use modern methods while the remaining 7.7 percent use traditional methods. The most common modern methods being used are pills, followed by female sterilization.

Contraceptive use varies greatly depending on the place of residence and educational status. The level of use in urban areas is almost twice as high as the level in rural areas. Likewise, the percentage of married women currently contracepting is much higher in Greater Accra (27.2 percent) than in the Volta region (14.6 percent), and other regions (less than 12 percent). Married women with middle school and higher than middle school education are two and three times as likely to use contraception than those without education.

World Bank/Yosef Hadar

Child health needs are pressing in Ghana.

The survey also showed that there is a high incidence of diarrhea among children in Ghana (13.4 percent of children within 24 hours before the interview and 26.3 percent in the past two weeks) with only slight variation by the age of mother and urban/rural status.

Only one-third of the children surveyed had health cards. The children from the rural areas are less likely to receive second and third doses of DPT and polio vaccines.

About 55 percent of the women received prenatal care from trained midwives and nurses while only 28 percent received it from doctors. During delivery, about 33 percent of the women were assisted by trained midwives or nurses, 28 percent by traditional birth attendants, and 7 percent by doctors.

Although most urban respondents (73 percent) had access to piped water, only a small proportion of rural respondents (12 percent) received it. Likewise, 30 percent of the rural respondents did not have toilet facilities as against 13 percent of the urban respondents.

– Bhishna Nanda Bajracharya

Bhishna Nanda Bajracharya is at the East-West Population Institute, Honolulu, Hawaii.

DEMOGRAPHER'S PAGE

Mr. ZIP Delivers

by Judy C. Felt

An intangible lacework of grids crisscrosses the United States, dividing it into myriad geographic components – all of them created by humans and all invisible to the naked eye.

For example, we live and work in states, counties, and incorporated cities. We cast our ballots in precincts. We own or rent land which is separated by precisely surveyed legal boundaries and is probably part of a water or sewer district. Every 10 years we are counted by the Census Bureau, which has partitioned the entire nation according to its own system of smaller areas such as Minor Civil Divisions or census tracts.

But there are other unseen boundaries, unofficial ones, that have no legal or political purpose. Large companies divide us into marketing territories. Telephone companies subdivide the map into area codes, essential for long-distance calls.

The ZIP Code is one of the best known and ubiquitous of these unofficial grids. ZIP Code areas, per se, levy no taxes on their residents, send no representatives to Congress. But nearly everyone knows his or her own ZIP, and these postal code numbers are generally so much a part of daily routine that people take them for granted – but without knowing where they came from or where they're going.

Putting ZIP into Mail

ZIP (Zoning Improvement Plan) was created solely to expedite delivery of mail. It was implemented on July 1, 1963, by the then-Post Office Dept. (now the Postal Service) along with a new sorting and distribution system. This five-digit code can now be found on 98 percent of all first-class mail.

Throughout most of U.S. postal history, letters were sorted manually by postal clerks, first to the correct state or large city, then to various smaller cities or areas within the state as the letter inexorably neared its destination. But whereas in 1847 only six pieces of mail per capita were delivered annually, by 1960 this had reached over 347 pieces of mail per capita. In 1987 this figure was 635 per capita, for a total of 153.5 billion pieces of mail.

In the early 1960s the Post Office wanted to take advantage of the new automated data processing equipment and the sorting machines which were then being developed. For that it needed a universal code and thus the ZIP Code system was created.

Every ZIP designates several areas, nested within one another:

Data firms "bridge" demographic data with corresponding ZIP Codes

- The first number of the Code identifies one of 10 national geographical regions.
- The second and third numbers designate smaller geographical areas. Today there are over 900 three-digit numbers used to designate a Sectional Center Facility, a city, or a government facility.
- The last two digits designate a specific Post Office, station or branch within the three-digit area.

Approximately 42,131 ZIP Code numbers are currently in use (which means 57,869 are still in reserve awaiting assignment in the future). There are presently 40,000 post offices, stations, and branches serving approximately 100 million homes, farms, P.O. boxes, and business locations in the United States. Nearly 1.5 million new addresses are created each year. Since only a little over 38,000 Codes were originally assigned, the number has increased by only around four thousand since 1963.

When does an area merit its own ZIP? Population density and mail volume are the two principal factors. Nonetheless, a ZIP Code in a rural area may have only 10 to 15 families and a single carrier, while an urban Code could have more than 50,000 delivery points and 50 or more carriers. Many corporations and government facilities possess designated ZIP Code numbers because of the volume of mail handled for them. 00401, the lowest ZIP Code in the country, belongs to the Reader's Digest Association in New York; the highest, 99950, is assigned to Ketchikan, Alaska. The Pentagon alone has four ZIPs.

Targeting Markets

No sooner was the ZIP Code system implemented by the Post Office than businesses began using ZIP boundaries for their own commercial needs. ("Mr. ZIP," incidentally, is himself a refugee from a long-forgotten Chase Manhattan ad campaign.) Sales territories were divided according to ZIP Codes. One company which markets seeds by mail began using the Code to follow the frost line northward in order to reach customers when they were ready to plan their gardens.

But to be really useful for marketing purposes, ZIP Codes needed to be linked to demographic and economic information, so that companies could selectively mail their material to customers most likely to buy their product. Starting with the 1970 Census, the Census Bureau provided selected demographic characteristics by ZIP Code, down to five digits for metro areas and three digits for nonmetro areas. In 1980 the Census Bureau published information down to five digits for all areas of the country. Other government agencies, such as the Internal Revenue Service, also began releasing statistical information by ZIP Code. The Postal

Judy C. Felt is a PRB research demographer

Service also periodically provides computer tapes which relate ZIP Codes to census tracts, but the tapes include no demographic data.

Several commercial data firms take the data provided by the Census Bureau, the IRS, and other sources and reorganize it into information for clients seeking specified target populations. They merge the various computer data bases and thereby combine, or "bridge," the demographic, social, and economic information available with the corresponding ZIP Code.

Utilizing such methods, commercial firms have put together packages identifying the locations of specific target groups in the population. These groups, called clusters, may have snappy marketing nicknames such as "Empty Nesters" which signify income, age, likely interests, and spending patterns. The ZIP Codes identified as having the highest percentage of residents with the preferred characteristics can then be gleaned from a larger mailing list, thereby cutting mailing costs and increasing the likelihood of a favorable response.

A wide variety of products and maps based on ZIP Codes are available from private data vendors; their prices vary depending upon the quantity and complexity of the data provided. The Postal Service itself plans to market detailed ZIP + 4 Code maps in the near future.

Ever-Changing Boundaries

Commercial-data users using ZIP to select a target population for marketing should exercise caution. A ZIP-Code-defined area can often be a very large geographic area in which thousands of people live, or it could be a single point to which mail is delivered to one company. Inhabitants of a ZIP often vary in social and demographic characteristics. In contrast, census tracts, as drawn by the Census Bureau, are designed to be relatively homogeneous in nature and for this reason have been more commonly used in marketing strategies.

Furthermore, unlike state boundaries, ZIP Codes are not a constant. They continually evolve to accommodate shifts in the handling and delivery needs of the postal system caused by changes in population size or real estate construction.

How do ZIP Code changes come about? Each letter carrier may have as many as 1,000 delivery points, and a ZIP Code can have from zero (yes, zero) to over 50 carriers. When the number of delivery points or volume of mail handled by a carrier nears the maximum, the carrier routes are modified, and more carriers may be added to that ZIP Code. When the number of carriers reaches a critical point, then adjustments in the ZIP Code boundaries, or assignment of new Codes, becomes necessary.

ZIP upheavals are predicted for Orlando, Jacksonville, and San Diego

Changes such as these happen on a continuing basis. They are usually initiated on a local level as increases in population density and mail volume make impacts on processing and delivery. As the growing need for change becomes obvious, the local Postmaster may appoint a committee, usually composed of local Postal Service management personnel, to study alternatives. Their recommendations, routed through administrative channels, are ultimately decided at Postal Service headquarters in Washington, D.C.

There, a group containing representatives from three offices (mail processing, mail delivery, and address information) reviews them and gives final approval. Many times changes are requested for political reasons; a wealthy neighborhood wishes to separate itself from a less affluent area by acquiring its own exclusive ZIP. (The same thing happens at the Office of Management and Budget, besieged by localities petitioning for their very own Metropolitan Statistical Area [MSA] designation.) Such requests for "vanity" changes, since they are not based on processing or delivery factors, are generally turned down.

Some 617 new ZIP Codes have been approved since April 1985. Some were boundary changes, others were new numbers taken from those in reserve. Over 200 of these changes occurred in Florida, where significant demographic growth prompted a major realignment in ZIP Code assignments in 1987.

Tampa, for instance, was assigned a new three-digit number which, when integrated with the two three-digit numbers already assigned, resulted in boundary changes affecting an estimated 1.5 million people. Similar ZIP-Code upheavals are predicted in the next few years for Orlando and Jacksonville, Fla., and San Diego, Calif.

An estimated 300 new Codes are taken from the reserve each year, but others are "retired" and put back into reserve when a local post office is closed (with a net annual increase of approximately 160 Codes per year over the last 25 years).

The Postal Service provides computer tapes on a monthly basis with current correct ZIP Codes, incorporating changes made during the previous month. This service is free of charge and allows data vendor firms to update the information packages that they sell. The same data base is also available monthly by carrier routes and by the new "enhanced" postal code ZIP + 4 Code (see below), but at present these tapes are used mainly by bulk mailers to update their mailing lists and to qualify for discount presorted rates.

And Now, ZIP + 4

As if ZIP Codes weren't enough, the ZIP + 4 Code (a euphemism for an optional nine-digit ZIP Code) was introduced in the early 1980s.

Continued next page

Mr. ZIP

Continued from preceding page

This latest refinement in numerical addressing is operational but is so far used by only mass mailers. ZIP+4 subdivides a ZIP Code into Segments, which could be one floor of an office building or one side of a residential street. If used by bulk mailers, the ZIP+4 reduces the time spent by the letter carrier in sorting, especially if the mail is presorted by ZIP+4 as well. There are cheaper rates to bulk mailers that presort to the ZIP+4 but, although many include the ZIP+4 number in the address, most still presort only by the 5-digit number.

The limited use of ZIP+4 may change when Postal Service bar coding – the curious tall and short bars printed on many business letters – becomes more widespread. Optical Character Readers (OCR) are now capable of reading the bottom line of a printed address. The more advanced OCRs can read four to six lines, consult a data base, and add a ZIP+4 code on the envelope even if only five digits were originally on the printed address. Once affixed with bar codes, an envelope can be sorted entirely by machine throughout the delivery process.

As demographic analysis becomes more refined, ZIP+4 also augers a not-too-distant era of micro-detailed marketing. The day may be coming when marketing is tailored to *truly* small areas – not just political subdivision, or even street, but ZIP+4 location – even, for that matter, individual telephone or modem or fax line. For in the final analysis, the whole purpose of ZIP Codes and the efforts detailed above is to make communications as efficient as possible.

A special thanks to the Library and staff of the U.S. Postal Service, Washington, DC, for assistance with information for this article.

References

Merrick, Thomas W. and Stephen J. Tordella, Demographics People and Markets, 1988, *Population Bulletin*, Vol. 43, No. 1, (Washington, DC: Population Reference Bureau, Inc., February, 1988).

Chapman, John, "Cast a Critical Eye," American Demographics, Vol. 9, No.2 (February 1987) pp.31-33.

U.S. Postal Service, *Annual Report of the Postmaster General, 1987* (U.S. Postal Service, February, 1988).

U.S. Postal Service, *1988 National Five-Digit ZIP Code and Post Office Directory* (U.S. Postal Service, 1988).

Coming Soon: Elderly America

Most people are aware that the U.S. population is aging. The extent of this demographic aging – and its consequences on the elderly themselves and on the social and economic fabric of the country – is the subject of "America's Elderly," PRB's latest *Bulletin*, written by Beth J. Soldo and Emily M. Agree.

About 1 out of 8 Americans is 65 years and over, and by 2030 the proportion is expected to be 1 out of 4. Given present projections of increases in life expectancy, by 2050, 5 percent of the U.S. may be 85 and over – the category presently considered the "oldest-old" of the population.

Although many people living longer are active and healthy well past retirement, the increase in the oldest-old – and the greater size of the 65-and-over group – is certain to cause greater concern about health-care funding. The vast majority – 95 percent – live in the community, not nursing homes. Those needing assistance generally receive help from family and friends.

The long-term outlook, however, requires difficult social choices. Government expenditures are three times greater for the U.S's elderly than for its children, raising the issue of "intergenerational equity," that is, allocating the amount of care society provides to those who have already contributed to it with the care to those who will contribute to it in the future. This kind of balancing-act decision – never easy in the best of cases – is made more difficult by the shifting proportions of the population's age components as the U.S. steadily ages.

Copies of "America's Elderly," by Beth J. Soldo and Emily M. Agree, the 52-page *Population Bulletin* (Vol. 43, No. 3, September 1988), can be ordered from: PRB, Circulation Dept., PO. Box 96152, Washington, DC 20090-6152, with checks payable to PRB. Prices are: $4.00 per single copy; 2-10 copies, $3.00 each; 11-50 copies, $2.50 each; over 50, $2.00 each. Orders for $50.00 or less must be prepaid and include $1.00 or 5 percent (whichever is greater) for postage and handling.

PRB Price Announcements

For the past four years PRB has managed to avoid any major adjustment in members' dues or in the price of its publications. Recent cost analysis, however, has revealed that PRB has been substantially subsidizing both materials sent to members and publications for general sale.

Although we are a nonprofit organization, one of our aims is to become as self-sustaining as possible in our efforts to disseminate important and objective information about world and U.S. population trends. Therefore we must increase membership dues and publication prices as of Jan. 1, 1989. An individual membership will rise to $45 a year. Annual cost for educators will be $30, for students $25, and for libraries $55.

Under this new plan, members will receive 11 *Population Todays*, four *Population Bulletins*, and the *World* and *U.S. Population Data Sheets*. Population Education materials, *Population Trends and Public Policy* papers, and other materials which we determined were of interest to a subset of our members could not cost-effectively be distributed to all; however, these publications will be available for purchase directly from PRB.

The good news is that you can take advantage of this early warning by renewing your membership before the end of the year, or by placing a publication order now, at current prices.

In January 1989, the price of a single *Population Bulletin* will increase to $7; *Population Trends and Public Policy* papers will be $5 each; World and U.S. Data Sheets will cost $3. In January, all members will receive a revised Publication Order Form with details of the new prices.

We would like to take this opportunity to thank you for your continuing support of PRB and its role of bringing demography to the forefront of policy debate around the world.

IRCA Aftermath

Continued from page 5

proportionately from Mexico. An estimated 70 percent (1,235,000) of the pre-1982 applicants and 83 percent (588,300) of the agricultural workers report Mexico as their country of citizenship. The second largest group are Salvadoran nationals who total 8 percent of the pre-1982 applicants, yet total less than 2 percent of the agricultural worker applications. Following citizens of El Salvador, the remainder of countries with more than 10,000 applications are citizens of: Guatemala, Colombia, the Philippines, Haiti, Nicaragua, Poland, the Dominican Republic, and Iran. Applicants from all other countries comprise about 11 percent of the total I-687 applicants.

The agricultural workers, also dominated by Mexican citizens with 83 percent of the applications, have a different distribution of country of citizenship. They are, in proportional order, citizens from: Haiti, India, El Salvador, Pakistan, Guatemala, Jamaica, and South Korea. Citizens from all other countries acco[illegible] for 5.1 percent of applicants.

Where Do They Live?

California was the residence of more than half (55 percent) of all pre-1982 applicants during the time of their application. About 18 percent of the pre-1982 applicants lived in Texas, 7 percent were in New York, 7 percent lived in Illinois, and 3 percent were living in Florida at the time they applied for legal status.

Of the agricultural workers who have applied so far, more than half of them (57 percent) also resided in California. Florida (11 percent), Texas (7 percent), Arizona (4 percent), New York (3 percent), Washington (3 percent) and Oregon (2 percent) are other states with more than 10,000 agricultural worker applications.

The LAPS statistics constitute the first available comprehensive data on the characteristics of undocumented persons living in the U.S. The INS plans to make a public user tape available after the processing of applications is completed.

– Audrey Singer

Audrey Singer is a PhD student in sociology at the Univ. of Texas at Austin.

SOFTWHERE

Census software: The U.S. Census Bureau has recently released their best seller, *The County and City Data Book 1988*, in an assortment of diskette versions.

The entire book is available on eight high-density IBM-compatible diskettes for $144. Detailed data organized by regions, counties, large cities, and small places are also available.

These files expand the utility of the data book, but do not replace it. Only the book includes the definitions, rankings, and other pertinent information used in analyzing the data.

The program has been simplified from previous attempts. The data can be browsed, selected, or combined with an accompanying free-of-charge utility program, and are easily imported into dBase or Lotus 1-2-3 files.

What a Deal! Dept.: To allow users to explore the usefulness of this product the Census Bureau offers a free sample diskette. Simply call Customer Services at 301-763-4100.

– D.L.

POPULATION UPDATE

Estimated United States Population:

As of June 1, 1988	245,898,000
As of June 1, 1987	243,711,000

The above estimates include armed forces overseas and are from U.S. Bureau of the Census, *Current Population Reports*, Series P-25, No. 1028.

Estimated World Population:

As of October 1988	5,150,000,000
Annual growth	89,000,000

Estimated by extrapolation from the mid-1988 population on PRB's *World Population Data Sheet*.

Latest Provisional Statistics for the U.S.: May 1988

	12 months ending with May					
	Number		Rate			
Item	1988	1987	1988	1987	1986	1985
Live births	3,840,000	3,754,000	15.7	15.5	15.7	15.7
Deaths	2,168,000	2,099,000	8.9	8.7	8.7	8.8
Natural increase	1,672,000	1,655,000	6.8	6.8	7.0	6.9
Marriages	2,375,000	2,418,000	9.7	10.0	10.1	10.4
Divorces	1,166,000	1,156,000	4.8	4.8	4.9	4.9
Infant deaths	38,300	38,200	10.0	10.2	10.4	10.7
Population base (in millions)			244.3	242.1	239.8	237.1

Note: Rates are given per 1,000 population, except for infant deaths, which are given per 1,000 live births.

Source: *Monthly Vital Statistics Report* (Vol. 37, No. 5) from the National Center for Health Statistics.

PRB's Workbook For Students

PRB's latest teaching tool, "World Population: Facts in Focus," is a workbook of practical learning exercises designed to accompany the *World Population Data Sheet*. The 20-page workbook offers a variety of exercises, ranging widely in rigor, that make it appropriate for use in junior high through college level courses.

The *1988 World Population Data Sheet* appears in 8½ x 11 inch page format in the center of the workbook for easy use by the reader. This four-page format has been popular in the past and was requested by many PRB members in last year's readership survey.

The variety of exercises in the workbook make it appropriate for use in social studies, geography, science, environmental studies, and mathematics courses. Some of the exercises call for simply finding information on the *Data Sheet* (a useful introduction to the *Data Sheet* and demographic terms), while others call for application of formulas, analysis of data, and data mapping.

The October issue of *Population Education Interchange* features a teacher's guide on ways to teach the workbook. (It also contains the answers to the workbook's exercises.) A map-and-chart quiz gives students a chance to demonstrate their ability to interpret a table of demographic data, as they match varying sets of mystery statistics with the correct country.

Included as well is the latest list of VHS videotapes acquired by PRB's Film Library. These tapes illuminate diverse population and environmental topics, and PRB offers them for rent to schools and groups.

—*K.C.*

Copies of the 20-page workbook, "World Population: Facts in Focus" with the accompanying teacher's guide, can be ordered from PRB, Circulation Dept., PO Box 96152, Washington, DC 20090-6152, with checks payable to PRB. Prices are: $2.00 per single copy, 2 or more copies $1.75 each. Orders for $50 or less must be prepaid and include $1.00 or 5 percent (whichever is greater) for postage and handling.

For a complete list of film library holdings, send a stamped self-addresses envelope to Film Libraries, PRB, Inc., 777 14th St., NW, Washington, DC 20005.

TAKE A NUMBER

Chicago Is... not growing very quickly, according to estimates and projections released by the city's Department of Planning. The projections offer an interesting glimpse into the demography of the country's third largest metro area since the 1980 Census. The city's population is projected to increase to just 3,033,000 by 1990, barely up from 3,005,000 at the 1980 Census. By 2010, the projections show a city population of 3,155,000. By ethnic group, blacks are expected to increase from 40 percent of the total in 1980 to 44 percent in 2010, while Hispanics rise from 14 to 24 percent, resulting in a city population over two-thirds "minority."

By contrast, New York City consisted of about 45 percent blacks and Hispanics in 1980. The report notes that the total fertility rate (TFR) in 1980 for non-Hispanic whites in Chicago was 1.5 lifetime births per woman in 1980, compared to 2.4 for blacks and 3.1 for Hispanics. The projections assume only a slight rise in white fertility, to a TFR of 1.6, a slight decrease for blacks to 2.2, and some convergence of Hispanic fertility to 2.5. From 1980 to 1985, both whites and blacks are estimated to have had net-out migration from the city of 17,000 and 7,700, respectively while a modest net in-movement of 2,000 Hispanics occurred. A companion report for the Chicago metro area, using the older SMSA definition, interestingly enough, estimates that the area grew from 7,103,624 in 1980 to 7,274,500 by 1985, but that virtually all of that growth took place in the suburban counties.

—*C.H.*

ADDENDA

Tourist Tunnel Vision

This summer's hit comedy, *Coming to America*, concerns the prince of a mythical African country who undertakes a quest for an American bride – hence the quasi-migration title.

As they consult an enormous globe and examine the geographic sweep of the U.S., Eddie Murphy (the prince) and Arsenio Hall (his closest friend) are elated by their destination's fabled vastness.

"America!" exclaims Murphy.

"The land is so big, the choices so infinite," marvels Hall. "Where shall we go – Los Angeles or New York?"

Bruce McBroom

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CURRENT READINGS

PRB welcomes materials on population topics for possible inclusion in Current Readings. Publishers may address review copies to Book Review Editor, POPULATION TODAY, Population Reference Bureau, 777 14th St. N.W., Washington, D.C. 20005.

ADJUSTMENT WITH A HUMAN FACE: Protecting the Vulnerable and Promoting Growth, Vol. 1 (A Study by UNICEF), edited by Giovanni Andrea Cornia, Richard Jolly, and Frances Stewart. New York: Oxford, 1987. 319 pages. $45.00 cloth.

A world recession, depressed commodity prices, a debt crisis, and an African drought have combined to stagger the economies of the Third World. The international community and individual governments of the less developed countries have scrambled to adjust to the adverse economic circumstances. Most of the activity, however, is aimed at balancing accounts.

How do adjustment policies affect the poor? Volume I of a UNICEF study examines the question. Predictably, the book's 10 eminent contributors found that during the 1980-1985 period, conditions for most people at the bottom began to deteriorate. Child mortality, educational opportunities, employment, family income, and other measures amply demonstrate that hard times increased for many people already living in poverty.

By using case studies, the authors show, however, that Third World governments have dealt with the exigencies of adjustment with varying effectiveness. Despite negative growth rates, some governments have successfully intervened, at least on a short-term basis, to protect the poor.

"The issue, therefore, is not whether to adjust," the authors note, "but how." The book contends that "most programmes aimed at protecting the poor are relatively inexpensive in terms of total government expenditure and GDP."

The authors put forward a series of recommendations for alternative adjustment packages that protect people at the bottom while allowing for economic growth. "A major emphasis of adjustment with a human face is restructuring – i.e. the reallocation of resources to priority needs. This is clearly essential if the resources going to the vulnerable are to be protected and even increased at a time when resources are limited." Alas, social reforms are more easily recommended than implemented.

The authors recommend the establishment of monitoring systems in Third World nations. As they point out, the Food and Agriculture Organization's "early warning" system effectively identifies potential food shortages. If nothing else, a monitoring system, composed of data on income, nutrition, health, and other basic social considerations, would put political pressure on national governments and the international community to take remedial action.

The book concludes, "In the longer term, resumed economic growth is essential to permit protection and improvements in human conditions ..."; outflows of resources from the Third World must be reversed, and terms of trade improved.

Adjustment with a Human Face is not a book to be judged by its cover – a picture of an undernourished child – or by its title; the book doesn't report on the human side of the adjustment process. It is, however, an extremely well-edited socioeconomic study and accessible to the layman. The book is highly recommended.

– Winthrop P. Carty

A SOCIAL AND ECONOMIC ATLAS OF INDIA, Delhi, India: Oxford University Press, 1988. (Contact Oxford University Press, New York, phone 1-201-796-8000.) 254 pages. $65.00. ISBN 0-19-562041-0.

A great value considering its sumptuousness, this 10 x 15 inch volume contains 246 multicolor maps and 365 charts displaying the geographic distribution of India's physical, demographic, agricultural, economic, and trade data. When readers desire greater precision, they can whip out the provided clear-plastic overlay and pinpoint the location of graphically displayed map data right down to the district level.

The India *Atlas* is primarily economic in focus, but it includes a number of population-related maps, mostly based on the 1981 Census. A profusion of worthwhile information between two covers, it is a worthy shelf companion for Oxford's *Population Atlas of China*, published earlier this year (see February 1988 *PT*).

– A.H.

Books Received

AMERICAN NEIGHBORHOODS AND RESIDENTIAL DIFFERENTIATION by Michael J. White (The Population of the United States in the 1980s: A Census Monograph Series). New York: Russell Sage Foundation, 1987. 127 pages. $37.50 (cloth).

ANNUAL REVIEW OF POPULATION LAW (Volume 11) edited by Paul E. Mason. New York and Cambridge, Mass.: UNFPA and Harvard Law School Library, 1987. 613 pages.

BORN UNWANTED: Developmental Effects of Denied Abortion edited by H. P. David, Z. Dytrych, Z. Matejcek, and V. Schuller. New York: Springer, 1988. 143 pages. $26.95 (cloth).

THE BURDEN OF SUPPORT: Young Latinos in an Aging Society by David E. Hayes-Bautista, Werner O. Schink, and Jorge Chapa. Stanford, Calif.: Stanford University Press, 1988. 196 pages. $32.50 (cloth).

CIRCUMCISION OF WOMEN: A Strategy for Eradication by Olayinka Koso-Thomas. London: Zed Books, 1987. 109 pages. (paper).

CLEARING THE AIR: Perspectives on Environmental Tobacco Smoke edited by Robert D. Tollison. Lexington, Mass.: Lexington Books, 1988. 148 pages. $27.50 (cloth).

RETURN TO AZTLAN: The Social Process of International Migration from Western Mexico edited by Douglas S. Massey, Rafel Alarcon, Jorge Durnad, and Humberto Gonzalez. Berkeley, Calif.: University of California Press, 1987. 345 pages. $37.50 (cloth).

SPOTLIGHT

REPUBLIC OF KOREA

Population (1988 est.): 42.6 million
Land area: 38,000 sq. miles
Births per 1,000 pop.: 19
Deaths per 1,000 pop.: 6
Rate of natural increase: 1.3 percent
Total fertility rate: 2.1
Infant mortality rate: 30 deaths per 1,000 infant deaths
Life expectancy at birth: 68
GNP per capita: $2,370
Capital: Seoul

by Wendy Patriquin

Host of the 1988 Summer Olympic Games, the Republic of Korea occupies the southern half of the Korean peninsula, with its only land border being along the Demilitarized Zone (DMZ) between North and South Korea. The people are racially, ethnically, and linguistically homogeneous, and there has not been a sizable minority since the Japanese left after World War II. The major population centers are in the Seoul-Inchon area of the northwest and in the fertile plains in the south. Seoul alone has a population of about 10 million. Buddhism and Shamanism are the major religions and because of missionary activity in the 19th century, there are about 4 million Christians.

The peninsula was divided into communist and noncommunist countries after the defeat of the Japanese in 1945 (they controlled the territory from 1910-1945) under the rule of the Soviet Union and the United States, respectively. The Soviet Union's refusal to cooperate in the holding of nationwide elections under UN observation in 1948 prevented the reunification of the country, and separate governments were formed. Although each government considers the border between them merely an administrative line, the chances for reunification in the near future are slim.

The post-1948 political history of South Korea has been troubled, with strong leaders (Syngman Rhee, Park Chung Hee, Chun Doo Wha) establishing powerful regimes by using the apparatus of democratic government to neutralize or suppress dissent. In the 1987 presidential election, the opposition was able to mount a strong challenge for the first time.

With the rapid industrialization that has occurred in the last three decades, the cities have grown at an incredible pace. The economic growth resulting from this mushrooming industrial production has put the Republic of Korea among the list of newly industrialized countries (NICs), a new category between the less developed and more developed countries. As has happened in other countries with a growing economy, population growth has declined in Korea. In 1958 the annual rate of natural increase was 2.9 percent; by the early 1980s this figure had fallen to 1.7 percent. The small family norm is spreading though the population, with the number of children desired by women declining dramatically. According to the Korea Fertility Survey in 1976, for example, 94 percent of women surveyed in 1971 wanted 3 or more children, while in 1976 only 56 percent wanted 3 or more.

As far as contraception knowledge and practice are concerned, the oral pill was the most well-known method (by 84 percent of the women), followed by the IUD (79 percent), the condom (49 percent), surgical sterilization (35 percent), and the rhythm method (23 percent). However, only 44 percent of women were currently using one of these methods and 63 percent had ever used one of these methods.

The Republic of Korea has the potential to become a powerful player in the international marketplace, particularly in the fields of automobile design and assembly, electronics, and computers. No longer having to deal with basic population problems, the country will be able to continue its path of economic growth and development.

Information Office Korean Embassy

Seoul's stadium ready for Olympics.